

GENERAL DESCRIPTION

- NFPA 1906 current edition Compliant Brush Truck (and NFPA 1901 where applicable)
- Most current year Model Ford F550, 4 door Extended Cab chassis, 4WD, Super single conversion with 6 inch lift
- Rescue Body
- Wheelbase: 60 inch Cab to Axle
- Pump-250 gpm minimum
- Tank:-300 gallon poly
- Color: Red

A. CHASSIS

1. All modifications, features, and labels as required by current edition of NFPA 1906 and where applicable NFPA 1901.
2. Standard cab lighting, instruments, gauges, controls, and air bags unless otherwise specified. Deluxe interior package.
3. Current year model Ford F550 4x4, 4WD, 4 door, Extended Cab, Super Single Conversion with 6 inch lift
4. Fire Truck Prep Package
5. Engine – Gasoline
6. High Idle
7. Transmission: Powerstroke 6.7L V, 5 speed Automatic
8. Alternator: Dual 220 amp, heavy duty
9. Axle: Single
10. Batteries: Two (2) 12 volt, maintenance free
11. Back up Alarm (97 DB)
12. Brake System-4 wheel ABS
13. Bumper, front
 - a. Black-extreme service finish
 - b. Brush Guard-Black Finish
 - c. Winch-15,000 lb; remote control in cab.
 - i. Useable on front and rear of vehicle
 - d. Guide marker lights, LED
 - e. High intensity LED fog lights with protection
 - f. High intensity LED off road lighting strip on front brush guard
 - g. Ground Sweeps
 - h. Turret nozzle, remote controlled
13. Bumper, rear
 - a. Hide away Class three (III) trailer hitch with receiver
14. Cab door – Inside reflective material (NFPA)
15. Camera
 - a. Rear vision system, LED/LCD, color with audio
 - i. Monitor in cab
 - ii. Camera , Rear center above compartment B1
 - iii. Camera, High on rear body-driver side
 - iv. Camera, high on rear body-passenger side
 - b. Dash camera
16. Command Panel between driver and officer
17. Console between front seats
 - a. Fabricated with heavy duty finish
 - b. Built in compartments

- c. Houses switch panel, pump control, siren, etc.
- 18. Chargers/Ports (in console)
 - a. Two (2) 12 V Receptacles
 - b. USB Ports-Two (2) minimum
 - c. 110 V Outlet-One (1) minimum
- 19. Door Locks
 - a. Electric
- 20. Exhaust system will be modified to extend out the right-hand rear of the unit
- 21. Floor mats
 - a. Black rubber. Heavy Duty
- 22. Fuel Tank: 40 gallon
- 23. Heater/Air Conditioner/Defroster
- 24. Master Battery Switch near driver's door
- 25. Mirrors, Trailer Towing style, Black, extendable
 - a. Power mirrors
- 26. Mirror, Vanity, Driver & Passenger
- 27. Mirror-Rearview: Day/night automatic
- 28. Headlights: Automatic high beams
- 29. Mud Flaps, heavy duty; Front and Rear, behind tires
- 30. Radio: AM/FM Stereo with Bluetooth and WIFI
- 31. Seat belt warning (NFPA)
- 32. Seating
 - a. Front: Bucket/Individual Seats
 - b. Rear: Bench Seats
- 33. Siren
 - a. Electronic. PA function with tow (2) 100 watt speakers
 - b. Low Frequency Tone
- 34. Speed reducer/governor to 60 mph (NFPA)
- 35. Steering
 - a. Power
 - b. Tilt and telescopic steering wheel
 - c. Cruise Control
- 36. Tires
 - a. 36 x 13.5-19.95 Irok Super Sapper 16 ply off road maximum traction tires
 - b. Tire Pressure Indicator (NFPA)
- 37. Tow eye/hooks: Front-Two (2) mounted to chassis frame
- 38. Tow eyes: Rear, Two (2) mounted to chassis frame
- 39. Vehicle Stability Testing (proof of) (NFPA)
- 40. Wheels
 - a. Firematic brand, solid steel disc 19.5 inch x 9.75 inch Super single custom wheels – Four (4)
 - b. Stainless steel lug nuts
 - c. With tire, load rated at 6400 lbs
 - d. Powder coated Black
- 41. Windows
 - a. Electric
 - b. Tinted
 - c. Moldings, black

B. BODY

1. Rescue Style Body
2. Modular Design
3. Severe duty
4. Metal used in fabrication must be defined in proposal. Strength of metal will be used in determining winning proposal.
5. CNC machining with CAD drawings will be provided with proposal.
6. Structure will be engineered to totally support the full length and width of the welded body.
7. Substructure: Must be defined in proposal
8. Sub-frame: Method of attachment must be defined in proposal.
9. Body will be mounted to allow for easy removal for major repair or disassembly.
10. Protective coating on chassis undercarriage.
11. ALL exterior fasteners utilized for holding panels or tread plate will be stainless steel.
12. Bed surface of truck sprayed with industrial coating (Zolatone or Rhino type liner)
13. Fenders
 - a. Black rubber contoured; over rear wheel openings
 - b. Bolted in place with stainless steel hardware
 - c. Replaceable if damaged
14. Wheel wells lined
15. Rear tailboard/step
 - a. 12-inch-deep, full width of the body
 - b. Covered with aluminum diamond plate
 - c. NFPA compliant tailboard surface
 - d. Supported by structural steel sub frame
 - e. Minimum ground clearance of 24" when fully loaded
16. Rub Rails
 - a. Aluminum tread plate
 - b. Mounted lower edge of body, below compartment doors.
 - c. Reflective inserts
17. Handrails
 - a. 1.25" diameter, anodized aluminum tube with integrated ribbed surface and LED lights.
 - b. Molded gaskets will be installed between the handrail stanchion castings and body surfaces.
 - c. Located anywhere climbing may be required per NFPA.. Will be defined at Pre-Build Conference
18. Running Board
 - a. Full length, each side.
 - b. Black finish, Solid step style.
19. Steps
 - a. NFPA compliant
 - b. Two (2) top of truck access – driver side rear of body
20. Hose Tray
 - a. Mounted on interior wall of opening above skid unit, length of tank.
 - b. Two (2) horizontal speedlay hose bed, Capable of holding 200 feet of 1.75 inch hose
 - c. Perforated floor
 - d. Double stack design with fixed center divider
 - e. One (1) Preconnect with 2 inch brass swivel with 1.5 inch hose connection (see discharges)
 - f. Stainless steel hose guides: two (2)
 - g. Cover: Diamond Plate

C. COMPARTMENTS

1. **Compartment locations and dimensions are approximate. Bidder will submit a design that will be constructed to the largest practical dimensions to provide maximum storage.**
2. Construction Material: Bidder will define in proposal
3. Doors: Swing/Slam doors. Painted color of truck.
4. Must be fabricated by manufacturer. Prefab cabinets will not be accepted.
5. Heavy duty diamond plate.
6. Sweep out design and drain holes for easy cleaning.
7. Liner: Industrial spray coating (Zolotone or Rhino type liner)
8. Vents in compartment
9. Lighting: LED strip
10. Shelving
 - a. Uni-strut type
 - b. Adjustable
 - c. Provided in all compartments
 - d. Location determine in final build specification
11. Cabinets – Location will be determined at Pre-Build Conference. Maximize space.
 - a. Driver Side
 - i. L1: Transverse (through to R1), Full height, rescue style
 - a) Include tool board on track, extendable to either side.
 - ii. L2: Over Rear Axle
 - iii. L3: Behind Rear Wheels
 - b. Passenger Side
 - i. R1: see L1. Transverse, full height, rescue style
 - ii. R2: Over rear axle
 - iii. Behind Rear Wheels
 - c. Rear of Truck Opening
 - i. Between side compartments
 - ii. No door
 - iii. Open room for slide in skid unit
 - d. Rear of Truck – Under Skid Unit
 - i. One (1) Roll Out Tray, heavy duty
 - ii. Fully extendable
 - iii. Capable of holding 600 pounds
 - iv. Door with spring closure
 - v. Storage for shovels, fire rakes, fire flaps, etc.
12. Roll Out Trays
 - a. Two (2), 500 pound capacity
 - b. Mounted on ball bearing slides with positive lock to hold tray in the in or out position
 - c. Fully extendable

D. SKID UNIT

1. All Stainless Steel or High Pressure hose Plumbing
2. "Drop-in" design for easy access to pump, plumbing, and tank.
3. Pump
 - a. Pump: 250 gpm minimum
 - b. Gasoline Engine
 - c. Electric primer
4. Rear Pump Panel

- a. Customary controls unless otherwise specified
- b. Illuminated control panel
- c. Panel Light
- d. Water Tank Level Gauge
 - i. One (1) transducer type LED gauge on pump operator's panel.
 - ii. One (1) transducer type LED gauge in cab
- 5. Inlets, Tank fill
 - a. Rear Tank Fill: One (1) 2.5 inch
- 6. Discharges
 - a. Rear: One (1) – 2.5 inch
 - b. Hosebed Preconnect: 1.5 inch hose connection; brass swivel
 - c. Hose Reel: 1 inch
 - d. Front Bumper
 - i. One (1)-1.5 inch
 - ii. One (1)-Turret nozzle
 - iii. Ground Sweeps
 - e. Scotty Round the Pump system
 - f. Hose Reel – Rear of truck
 - i. Hannay, electric rewind
 - ii. Mounted on top of tank if possible.
 - iii. Capable of holding 250 feet of 1 inch lightweight booster hose
 - iv. Controls on Pump Panel
- 7. Tank
 - a. 300 gallons
 - b. Non-corrosive stress relieved thermoplastic; black in color; UV stabilized
 - c. Tank fill tower
 - d. Tank to Pump – 2.5 inch
- 8. Tank Level gauges
 - a. One (1) transducer, LED, in cab
 - b. One (1) transducer, LED, on pump panel

E. ELECTRICAL

- 1. A complete electrical wiring diagram will be supplied with the apparatus.
- 2. All wiring and electrical equipment will meet current edition of NFPA 1906 and where applicable NFPA and SAE standards.
- 3. Electrical panel will be easily accessible
- 4. Wiring
 - a. All wires will be encased in heavy duty protective loom where possible
 - b. All wiring under chassis will be encased in protective wiring loom. NO EXCEPTION
 - c. Loose and/or unprotected wiring will be unacceptable
- 5. Pump Plus 1200 battery charger system
- 6. Kussmaul "Super Auto-Eject", 110 volt 15 amp shoreline receptacle
- 7. Pre-wired for radio installation
- 8. Two (2) 12 V receptacles, inside compartments, one (1) each side
- 9. Two (2) electrical ports for 110 V receptacle, inside compartments, one (1) each side
- 10. One (1) electrical ports for 110 V receptacle, rear of truck
- 11. Inverter (12 V to 110 V), minimum 3500 watts.

F. LIGHTING

- 1. All lighting and reflectors will meet Federal Motor Vehicle Standards.

2. Cab marker lights and signaling devices will be provided on the commercial chassis cab from the chassis manufacturer. FMVSS reflectors will be provided as required.
3. All lighting will be LED unless specified otherwise.
4. Emergency Lighting package - NFPA Zone lighting
 - a. ALL body mount, bumper mount and/or grille mount NFPA Zone Emergency lighting will be Whelen 600 Series LED lighting, unless otherwise specified.
 - b. Tail/brake lights, Whelen 600 series-Tri-Cluster LED or EQUIVALENT
5. Other Lighting
 - a. Headlights-LED
 - b. High intensity LED fog lights
 - c. Light bar – Low profile LED light bar with protective cage
 - d. Brow light, LED
 - i. Mounted below light bar on front
 - e. License Plate light-LED
 - f. Ground illumination/under carriage lights. 4 inch LED, clear. With outward facing angle brackets.
 - i. Two under the cab doors. One each side.
 - ii. Two under sides of body.
 - iii. Two installed to illuminate the rear tailboard area
 - iv. Lights will activate with parking brake.
 - g. Scene lights
 - i. Surface mounted LED scene lights
 - a) Two (2) Left side
 - b) Two (2) Right side
 - c) Two (2) Rear
 - ii. Two (2) Semi-Recessed Scene light
 - a) One (1) each side, center, upper body
 - h. Telescopic Scene Lights
 - i. Two (2), 12 volt, LED
 - ii. 20,000 lumens minimum
 - iii. Remote controlled at light and in cab of truck.
 - i. Work Light
 - i. Integrated with rear vision camera if possible
 - ii. Rear at skid unit
 - j. Directional Traffic Adviser-Rear of truck

G. PAINT, STRIPING, & LETTERING

1. NFPA 1901-2016 Compliant
2. Department will approve paint final paint color, scheme, and lettering during pre-build conference.
3. Reflective Chevron Striping on Rear (red and yellow stripes), NFPA Compliant
4. Three (3) inch high reflective lettering and department design on doors of truck.

H. LOOSE EQUIPMENT

1. Equipment required by the NFPA 1906 and 1901 Annex that is not specified in this document will be supplied by the fire department.
2. All equipment will be mounted by the truck manufacturer/builder at the direction of the fire department.
3. Brackets will be provided for all items
4. Equipment to be provided by Contractor:

1	Miscellaneous Hardware	One bag of miscellaneous hardware will be supplied with the finished apparatus. Include nuts, bolts, screws, washers, etc. used in the manufacture of the apparatus.
1	DOT Highway Safety Kit	Includes three (3) collapsible reflective safety triangles, 2 traffic vests, and two (2) rechargeable illuminating warning devices
4	Traffic cones	Collapsible traffic safety cones
1	First Aid Kit	Basic First Aid Kit
1 set	Wheel chocks	Underbody set of wheel chocks
2	Hose Reel	Hannay Hose Reel with electric rewind
5	Hose, lightweight	1 inch, 50 ft sections, lightweight booster hose
2	Nozzle	Task Force Tips DP 1040p or EQUIVALENT
2	Flashlights	Flashlights, LED, hand held, rechargeable, mounted
1 set	Hand tools, Basic	Axe, pick head Rubber mallet Crowbar Bolt Cutters Shovel, pointed Shovel, Scoop Basic Tool box with hammers, wrenches, screwdrivers, etc. Rake (for Wildland Fires) Fire Flap McLeod Tool Pulaski Tool